## **CLAIMS**

- 1. A process for producing carboxylic acid, which comprises reacting aldehyde-containing oily solution with an aqueous hydrogen peroxide solution in the presence of a catalyst comprising a polymer compound having a sulfonic acid group in a side chain thereof in a heterogeneous solution system.
- 2. The process for producing carboxylic acid according to claim 1, wherein the polymer compound is at least one polymer selected from a styrene polymer, a copolymer of styrene and divinylbenzene, and a fluorocarbon polymer.
- 3. The process for producing carboxylic acid according to claim 1 or 2, wherein the aldehyde is a compound represented by the following formula (1):

RCHO (1)

wherein R represents a monovalent group selected from hydrogen, an alkyl group, a cycloalkyl group, an aryl group, and an aralkyl group.